

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/523,007
Source: PCT
Date Processed by STIC: 2-1-06

ENTERED

BEST AVAILABLE COPY

CRF Errors Edited by the STIC Systems Branch

Serial Number:

10523,007

CRF Edit Date:

2-1-06

Edited by:

ze

___ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

___ Corrected the SEQ ID NO. Sequence numbers edited were:

___ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

✓ Deleted: ✓ invalid beginning/end-of-file text ; ___ page numbers

___ Inserted mandatory headings/numeric identifiers, specifically:

___ Moved responses to same line as heading/numeric identifier, specifically:

___ Other:

Revised 09/09/2003



PCT

RAW SEQUENCE LISTING

DATE: 02/01/2006

PATENT APPLICATION: US/10/523,007

TIME: 12:46:19

Input Set : A:\pto.kd.txt

Output Set: N:\CRF4\02012006\J523007.raw

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3 <110> APPLICANT: Evolva Ltd.
4     Goldsmith, Neil
5     Soensen, Alexandra M. P.
6     Nielsen, Soen V.S.
8 <120> TITLE OF INVENTION: Methods of mixing large numbers of heterologous genes
10 <130> FILE REFERENCE: P 669 PC00
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/523,007
C--> 12 <141> CURRENT FILING DATE: 2005-02-01
12 <150> PRIOR APPLICATION NUMBER: DK PA 2002 01173
13 <151> PRIOR FILING DATE: 2002-08-01
15 <150> PRIOR APPLICATION NUMBER: DK PA 2003 00787
16 <151> PRIOR FILING DATE: 2003-05-23
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TIME: 12:46:19

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Input Set : A:\pto.kd.txt

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DATE: 02/01/2006

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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/523,007

DATE: 02/01/2006

TIME: 12:46:20

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Output Set: N:\CRF4\02012006\J523007.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:1007 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5,Line#:998

**Raw Sequence Listing before editing,
for reference only**



PCT

RAW SEQUENCE LISTING

DATE: 01/26/2006

PATENT APPLICATION: US/10/523,007

TIME: 08:57:22

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4     Goldsmith, Neil
5     Soensen, Alexandra M. P.
6     Nielsen, Soen V.S.
8 <120> TITLE OF INVENTION: Methods of mixing large numbers of heterologous genes
10 <130> FILE REFERENCE: P 669 PC00
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/523,007
C--> 12 <141> CURRENT FILING DATE: 2005-02-01
12 <150> PRIOR APPLICATION NUMBER: DK PA 2002 01173
13 <151> PRIOR FILING DATE: 2002-08-01
15 <150> PRIOR APPLICATION NUMBER: DK PA 2003 00787
16 <151> PRIOR FILING DATE: 2003-05-23
18 <160> NUMBER OF SEQ ID NOS: 5
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Does Not Comply
Corrected Diskette Needed
(pg. 6)

RAW SEQUENCE LISTING

DATE: 01/26/2006

PATENT APPLICATION: US/10/523,007

TIME: 08:57:22

Input Set : A:\SequenceListing.txt

Output Set : N:\CRF4\01262006\J523007.raw

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67	actaattaag	ttagtcaagg	cgccatcctc	atgaaaactg	tgtaacataa	taaccgaagt	240
69	gtcgaaaagg	tggcaccttg	tccaattgaa	cacgctcgat	gaaaaaata	agatatatat	300
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73	ttcatctact	atttccttcg	tgtaatacag	ggtcgtcaga	tacatagata	caattctatt	420
75	acccccatcc	atacaagctt	ggcgccgaat	tcgctgaccc	ggggatccgc	ggccgcaggc	480
77	ctaaattgat	ctagagcttt	ggacttcttc	gccagagggt	tggtaagtc	tccaatcaag	540
79	gttgctcggt	tgtctacctt	gccagaaatt	tacgaaaaga	tggaaaagg	tcaaactcgt	600
81	ggtagatacg	ttgttgacac	ttctaaataa	gcgaatttct	tatgatttat	gatttttatt	660
83	attaaataag	ttataaaaaa	aataagtgtg	tacaaatttt	aaagtgactc	ttaggtttta	720
85	aaacgaaaat	tcttgttctt	gagtaactct	ttcctgtagg	tcagggttgc	ttctcaggta	780
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89	aatgcacctc	gcagggcgcg	cctgatgagc	ctgaactgcc	cgggcaaata	agctggacgt	900
91	ctgcctgcat	taatgaatcg	gccaacgcgc	ggggagaggc	ggtttgcgta	ttgggcgctc	960
93	ttccgcttcc	tcgctcactg	actcgctgcg	ctcggtcggt	cggctgcggc	gagcgggtat	1020
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97	catgtgagca	aaaggccagc	aaaaggccag	gaaccgtaaa	aaggccgcgt	tgctggcggt	1140
99	tttccatagg	ctccgcccc	ctgacgagca	tcacaaaaat	cgacgctcaa	gtcagagggtg	1200
101	gcgaaacccg	acaggactat	aaagatacca	ggcgtttccc	cctggaagct	ccctcgctgcg	1260
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117	tttttttggt	tgcaagcagc	agattacgcg	cagaaaaaaa	ggatctcaag	aagatccttt	1740
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127	gtagataact	acgatacggg	agggcttacc	atctggcccc	agtgtctgaa	tgataccgcg	2040
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131	gcgcagaagt	ggtcctgcaa	ctttatccgc	ctccatccag	tctattaatt	gttgccggga	2160
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141	taattctctt	actgtcatgc	catccgtaag	atgcttttct	gtgactgggt	agtactcaac	2460
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159	cagcgtgacc	gctacacttg	ccagcgccct	agcggccgct	cctttcgctt	tcttcccttc	3000
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RAW SEQUENCE LISTING

DATE: 01/26/2006

PATENT APPLICATION: US/10/523,007

TIME: 08:57:22

Input Set : A:\SequenceListing.txt

Output Set: N:\CRF4\01262006\J523007.raw

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165 acgtagtggg ccacgcacct gatagacggt ttttcgccct ttgacgttgg agtccacgtt 3180
167 ctttaatagt ggactcttgt tccaaactgg aacaacactc aacctatct cggtctattc 3240
169 ttttgattta taagggattt tgccgatttc ggcctattgg ttaaaaaatg agctgattta 3300
171 acaaaaattt aacgcgaatt ttaacaaaat attaacgctt acaatttcca ttcgccattc 3360
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187 <223> OTHER INFORMATION: Ampicillin resistance gene
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193 <223> OTHER INFORMATION: ColE1
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198 <222> LOCATION: (2975)..(3431)
199 <223> OTHER INFORMATION: f1-phage origin of replication
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203 <221> NAME/KEY: terminator
204 <222> LOCATION: (579)..(907)
205 <223> OTHER INFORMATION: ADH1
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209 <221> NAME/KEY: promoter
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211 <223> OTHER INFORMATION: Cup1 promoter
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219 ttttgattta ttttctctca tatatgtgta taggtttata cggatgattt aattattact 180
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223 ttgctgtcag tcaactgtcaa gagattcttt tgctggcatt tcttctagaa gcaaaaagag 300
225 cgatgcgtct tttccgctga accgttccag caaaaaagac taccaacgca atatggattg 360
227 tcagaatcat ataaaagaga agcaataaac tccttgtctt gtatcaattg cattataata 420
229 tcttcttggt agtgcaatat catatagaag tcatcgaaat agatattaag aaaaacaaac 480
231 tgtacaatca atcaatcaat catcacataa aatgttcaaa gcttggcgcc gaattcgctc 540
233 acccggggat ccgcggccgc aggcctaaat tgatctagag ctttggactt cttcgccaga 600
235 gggttggtca agtctccaat caagggtgtc ggcttgtcta ccttgccaga aatttacgaa 660
237 aagatggaaa aggggtcaat cgttggtaga tacgttggtg acacttctaa ataagcgaat 720
239 ttcttatgat ttatgatttt tattattaaa taagttataa aaaaaataag tgtatacaaa 780
241 ttttaaagtg actcttaggt tttaaaacga aaattcttgt tcttgagtaa ctctttcctg 840
243 taggtcaggt tgctttctca ggtatagcat gaggtcgctc ttattgacca cacctctacc 900
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RAW SEQUENCE LISTING

DATE: 01/26/2006

PATENT APPLICATION: US/10/523,007

TIME: 08:57:22

Input Set : A:\SequenceListing.txt

Output Set: N:\CRF4\01262006\J523007.raw

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251 cgttcggctg cggcgagcgg tatcagctca ctcaaaggcg gtaatacggg tatccacaga 1140
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277 aaactcacgt taagggattt tggatcatgag attatcaaaa aggatcttca cctagatcct 1920
279 tttaaattaa aaatgaagtt ttaaataaat ctaaagtata tatgagtaaa cttggtctga 1980
281 cagttaccaaa tgcttaatac gtgaggcacc tatctcagcg atctgtctat ttcggttcac 2040
283 catagttgcc tgactccccg tcgtgtagat aactacgata cgggagggct taccatctgg 2100
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291 caacgttggt gccattgcta caggcatcgt ggtgtcacgc tcgtcgtttg gtatggcttc 2340
293 attcagctcc ggttcccaac gatcaaggcg agttacatga tccccatgt tgtgcaaaaa 2400
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334 <210> SEQ ID NO: 3
335 <211> LENGTH: 4188
336 <212> TYPE: DNA
337 <213> ORGANISM: Artificial sequence
339 <220> FEATURE:
340 <223> OTHER INFORMATION: EVE8 vector

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RAW SEQUENCE LISTING

DATE: 01/26/2006

PATENT APPLICATION: US/10/523,007

TIME: 08:57:22

Input Set : A:\SequenceListing.txt

Output Set: N:\CRF4\01262006\J523007.raw

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350 <222> LOCATION: (1730)..(2670)
351 <223> OTHER INFORMATION: ColE1
354 <220> FEATURE:
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356 <222> LOCATION: (3662)..(4118)
357 <223> OTHER INFORMATION: fl-phage origin of replication
360 <220> FEATURE:
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362 <222> LOCATION: (1027)..(1355)
363 <223> OTHER INFORMATION: ADH1
366 <220> FEATURE:
367 <221> NAME/KEY: promoter
368 <222> LOCATION: (582)..(969)
369 <223> OTHER INFORMATION: Met25 promoter
372 <220> FEATURE:
373 <221> NAME/KEY: misc_feature
374 <222> LOCATION: (1365)..(1603)
375 <223> OTHER INFORMATION: ARS1 (autonomous replicating sequence) for Yeast replication
378 <220> FEATURE:
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380 <222> LOCATION: (49)..(574)
381 <223> OTHER INFORMATION: lambda spacer DNA (22428-22923)
384 <400> SEQUENCE: 3
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397 gaaatatggt ttttcgtcat gttttgagtc tgctgttgat atttctaaag tcggtttttt      420
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VERIFICATION SUMMARY

DATE: 01/26/2006

PATENT APPLICATION: US/10/523,007

TIME: 08:57:23

Input Set : A:\SequenceListing.txt

Output Set: N:\CRF4\01262006\J523007.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:1007 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5,Line#:998
L:1160 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:1
L:1162 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
L:1162 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:1
L:1164 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
L:1164 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:1
L:1166 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
L:1166 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:1
L:1168 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5